FA-1.3 Rev. 1 NCC98 08/27/97

Title: FA-1.3: Shuttle and Virtual Spacecraft Operations

# **Objectives:**

- Verify the Scheduling of Virtual Spacecraft SAR's for International Space Station and STS.
- Verify Slide function based on a Shuttle Launch Slip.
- Train Forecast Schedulers.
- Documentation verification.

#### **Configuration:**

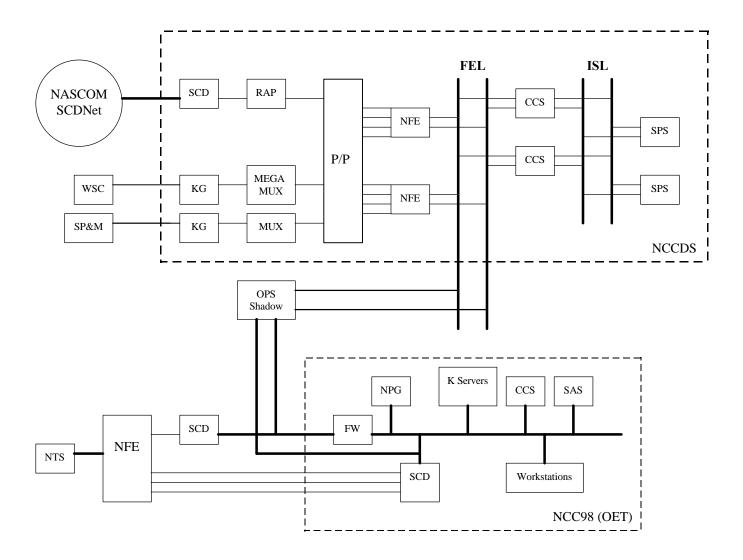
System will be configured in the internal test configuration with the NTS/UPS configured to simulate the externals. All operator actions resulting in system output will be directed to NTS/UPS. (See figure next page.)

# **Prerequisites:**

- NSIA will configure system as pictured above.
- All test and operator accounts are set up.
- Database modifications have been made to reflect Virtual Spacecraft.
- Operator will review the SPSR User's Guide.
- All NTS data has been created and verified.

### **Data Source:**

Data will originate from operations and NTS/UPS.



# Ops Scenario: (Italicized steps are performed by NSIA, all others are performed by the operator.)

#### SCHEDULE MAINTENANCE CONTROL

- 1. Logon to the workstation
- 2. Review current Batch Boundary and current settings of absolute and relative boundaries.
- 3. Verify Batch Boundary is set to 14 21 days in the future.
- 4. Review Alert Period Parameters.
- 5. Set the Batch Request Receipt Alert Period to the 14 to 21 days from current day.

#### RECEIPT/VALIDATION OF SCHEDULES

- 6. Shadow receipt of actual operations forecast schedules from the POCCs on Monday.
- 7. *Verify receipt and validation of schedule requests and transmission of SRMs.*

#### FORECAST SCHEDULE

- 8. Block resource NO USER times with S0200PMs based on OPM-54's (if applicable) for the Forecast period.
- 9. From UPS or NTS transmit the following
  - a. STS/ISS SAR s using Virtual Spacecraft SSA and KSA Services.

#### SCHEDULE GENERATION

10. Generate schedules.

#### Launch Slip

- 11. Based on a one day launch slip perform a Slide function and rerun Schedule Generation to reflect new Launch window.
- 12. Activate schedule.

### **NCD**

13. Operator should perform a delog to analyze incoming 99/10's, 99/11's, 99/12's, 99/21's and 99/25's.

### Roles and Responsibilities:

#### FA:

- Observe shadowing of receipt of schedule requests.
- Conduct generation of alternate forecast schedules.
- Evaluate/compare alternate schedules and select the most effective forecast schedule.
- Perform conflict resolution on selected schedule.
- Activate schedule.
- Train FA and fill out skills catalogs and Training Event Reports (TERs).
- Checkout redlined version of LOPs including, but not limited to:

• NCC-LOP-002 OPM-59 Message Processing

NCC-LOP-006 OPM-54 WSC Scheduling Request Message Processing

• SU-FA-LOP-001 Scheduling SHOS for the WSC MRT

• SU-FA-LOP-002 Disabling the Forecast Position

• SU-FA-LOP-003 Scheduling GRTS Events in the Forecast Period

### NSIA:

- One NSIA engineer required.
- Configure system.
- Perform all italicized steps in test case.
- Observe shadowing of receipt of schedule requests.
- Observe/assist FA in completion of all schedule generation and activation activities.

#### DRAFT

# DOCS:

• Checkout redlined version of the following documents:

• 532-HB-NCC/SO Scheduling Handbook (Forecast Section).

• 532-UG-NCC/SPS-1&2 SPS 1&2 User's Guide

532-UG-NCC/SPS-3 SPS-3 (DT&T) User's Guide

# **Estimated Run Time:**

4 hours run time

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